

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/905,718	05/	16/2001	Carlton Grant Willson	. PA27-02V12	2731	
75	590	12/22/2004		EXAM	EXAMINER	
Molecular Imp		c.	MEEKS, TIMOT	MEEKS, TIMOTHY HOWARD		
Legal Departme P.O. Box 81536			ART UNIT	PAPER NUMBER		
Austin, TX 78	3708-1536	6	1762	· <del></del>		
				DATE MAILED: 12/22/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		09/905,718	WILLSON ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Timothy H. Meeks	1762				
Period fo	<ul> <li>The MAILING DATE of this communication apport</li> </ul>	ears on the cover sheet with the c	correspondence address				
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed vs will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 18 Oc	ctober 2004.					
2a)	This action is <b>FINAL</b> . 2b)⊠ This	action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
4)⊠	Claim(s) 85-92,94-98,101,103,104 and 107 is/a	are pending in the application.					
	4a) Of the above claim(s) is/are withdraw	vn from consideration.					
5)	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>85-92,94-98,101,103,104 and 107</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/or	r election requirement.					
Applicati	ion Papers	·					
9)[	The specification is objected to by the Examine	r.					
10)🖂	D)⊠ The drawing(s) filed on <u>30 November 2004</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority ι	under 35 U.S.C. § 119						
a)l	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau  see the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)).	ion No ed in this National Stage				
A44aab	Wal	·					
Attachmen  1) Notice	t(s) e of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
	e of References Cited (P10-692) e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
3) 🔯 Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date 20041018	5)  Notice of Informal P 6)  Other:	Patent Application (PTO-152)				

Art Unit: 1762

### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 10/18/04 has been entered.

# Specification

The amendments filed 1/16/04 and 7/19/04 are objected to under 35 U.S.C. 132 because they introduce new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The substitute specification filed on 1/16/04 introduces subject matter that the original specification does not reasonably convey that applicants possessed at the time the application was filed. The new subject matter is as follows:

 In paragraph 19 and Figure 1B, a "substance 22" is generically referred to however the original specification only defined this material as a "polymerizable composition".

Art Unit: 1762

- In paragraph 19, support for the sentence "Preferably, substance 22 is.....without requiring high pressures" cannot be found in the original specification.
- In paragraph 20, a "curing agent 24" is generically referred to as being "applied to the template" however, the only "curing agent" described in the original specification as applied in the manner shown in Figure 1C is "activating light" as defined at page 4 of the original specification.
- Almost the entire disclosure at paragraphs 22-24 and Figure 2 lacks a description in the original specification that would reasonably convey that applicants had possession of the subject matter described therein at the time the application was filed. For example, applicants never stated "The resulting structure can be further processed to complete the manufacturing process using well-known techniques" in the original disclosure, nor did they even remotely describe a "course orientation" and "fine orientation" process as is described in the substitute specification. Likewise, the disclosure of an organosilicon solution at paragraph 23 is completely without basis in the original specification.

  Additionally, a "preliminary etch" and an "oxygen-etching" are not described in the original specification.
- The subject matter added to paragraphs 27 and 33 in the after final amendment filed on 7/19/04 is new subject matter for the reasons more specifically recited in the 112, first paragraph, rejection below.

It is requested that all of the new subject matter be removed from the specification including the drawings.

Art Unit: 1762

Applicant is required to cancel the new matter in the reply to this Office Action.

## Claim Objections

Claims 88 and 104 are objected to because of the following informalities: At line 2 of each of these claims, "further includes" should be "further including". Appropriate correction is required.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 85-92, 94-98, 101, 103, 104, and 107 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The original disclosure does not reasonably convey that applicants had possession of the subject matter added to the claims in the amendment filed on 1/16/04 at the time the application was filed. Applicants' original disclosure only described applying an electric field to a template having a topography as shown in original figure 1. Applicants' explanation of the implied support for these limitations set forth in the after final amendment of 7/19/04 has been fully considered but is not persuasive. Although the now claimed subject matter may describe what occurs when an electric

Art Unit: 1762

field is applied to a template having an uneven topography, the claimed subject matter

includes any process for forming adjacent electric fields with different strengths, which

includes manners beyond using a template with an uneven topography, which is the

only species for which the original specification conveys that applicants possessed at

the time the invention was filed. In summary, the original disclosure does not

reasonably convey that applicants had possession of all methods for forming the

adjacent electric fields with differing strength as is encompassed by the added subject

matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 86 and 95 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

The Markush language in these claims is confusing because it is open to species

other than those listed. The examiner suggests the following language: "from the group

of topologies consisting of...."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 1762

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 85-92, 94-98, 101, 103, 104, and 107 are rejected under 35 U.S.C. 102(e) as being anticipated by Schaffer et al. (6,391,217).

The process as claimed is explicitly disclosed at Figures 2A-3C, col. 1, lines 43-48, col. 1, line 65 to col. 2, line 5, col. 2, lines 15-20 and 42-55, col. 5, lines 15-20, col. 5, line 60- col. 6, line 10, col. 6, lines 35-40, col. 8, lines 40-55, and examples 2 and 3.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy H. Meeks whose telephone number is (571) 272-1423. The examiner can normally be reached on Mon 6-6 and Tues-Thurs 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Timothy H Meeks Primary Examiner Art Unit 1762